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ORIGINAL ARTICLES

Stigmatization and Mental Health in a Diverse Sample of Transgender Women

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Abstract

Purpose: Previous research indicates elevated risk for psychological distress in sexual and gender minority populations, and some research suggests that stigma contributes to elevated psychological distress among members of these groups. This study examined the hypothesis that exposure to transgender-related stigma (TRS) is associated with both higher levels of depression and anxiety among transgender women.
Methods: We analyzed data from a diverse sample of 191 adult transgender women living or working in the San Francisco Bay area who were recruited using purposive sampling methods to participate in a cross-sectional survey, which included measures of stigmatization, depression, and anxiety.
Results: Higher levels of exposure to TRS were independently associated with higher levels of depression ($\beta = 0.31$, $P < .001$) and anxiety ($\beta = 39$, $P < .001$), adjusting for self-reported health and sociodemographic covariates. Associations between stigmatization, depression, and anxiety were not moderated by participants' age or race/ethnicity.
Conclusion: Findings suggest a need for counseling interventions to address the role of stigmatization as a factor potentially contributing to psychological distress among transgender women. This research further highlights the need to develop a stronger evidence base on effective counseling approaches to improve the mental health of transgender women.

Key words: discrimination, mental health, stigma, transgender women.

Introduction

Scientific and professional bodies have acknowledged various health disparities that may challenge the well-being of transgender individuals and, accordingly, have called for additional research to understand the social determinants of health in this population.[1,2] Transgender individuals may be at elevated risk for mental health problems compared with non-transgender (or cisgender) individuals.[3,4] A robust body of transgender research provides consistent evidence of mental health problems, including low self-esteem,[5,6] depression,[6–12] anxiety,[8,13,14] and suicidal ideation and suicide attempts.[4,10,15,16] In a sample of 226 transgender women, nearly half met criteria markers for depression and anxiety (51.4% and 40.4% respectively).[8] A systematic review of research with transgender individuals found that male-to-female (MTF) transgender individuals reported high rates of both suicidal ideation (weighted mean, 53.8%) and lifetime suicide attempts (weighted mean, 31.4%).[17]

Studies have explored the risk and protective factors associated with mental health problems among transgender women. In studies of transgender women, depression was associated with level of education and a self-reported history of sexual partner violence[7] as well as exposure to both verbal and physical abuse.[11] A study including 515 transgendered individuals (392 MTF and 123 [female-to-male] FTM) revealed that histories of attempted suicide were higher among young, unemployed participants with a co-occurring history of alcohol or drug treatment.[15]

Prior studies have reported on the persistence of stigmatization among transgender individuals.[7,18–22] Stigma can be defined as any attribute that is perceived to discredit an individual or group as being deviant from the norm, and stigmatization refers to interpersonal processes and social interactions characterized by a range of social phenomena including prejudice, mistreatment, and discrimination due to stigmatized attributes.[23,24] A study of 350 transgender individuals found that 41% reported experiences of transgender-related discrimination (TRD).[19] Common examples of TRD may include the use of physical threats or harassment, incorrectly gendered terminology, or discomfort/disapproval of being transgender.[25] Meyer's minority stress model, supported by several studies,[22,26–29] states

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that exposure to stigmatization and discrimination among lesbian, gay, or bisexual (LGB) individuals may lead to mental health problems.[27]

An emerging body of literature examines transgender-related minority stress processes in transgender populations.[22] Previous research has documented frequent risk behaviors such as unprotected sex, illicit drug use, and hazardous alcohol use in samples of transgender women,[4,11] and findings have shown that stigma is associated with each of these health risk behaviors.[30] Multiple factors associated with TRD have included: low socioeconomic status, racial/ethnic status, lacking health insurance, and a history of sexual and physical violence.[19] It is unclear whether exposure to stigma has an independent association with mental health indicators among transgender women, controlling for the presence of these additional health risk factors.

Younger transgender individuals may be particularly vulnerable to the adverse psychological consequences of transgender-related stigma (TRS) compared to their older counterparts. Prior research has suggested that younger sexual and gender minority individuals (i.e., those who identify as LGB or transgender) may experience psychological distress due to negative peer and family interactions and, due to their relative youth, may lack the coping resources to buffer against the psychological internalization of negative attitudes and bias in comparison to their older counterparts.[31,32] Previous research suggesting that racial/ethnic minority LGB individuals may experience exacerbated levels of psychological distress compared to their white counterparts[27] may also apply to transgender women.[10] Consequently, the negative effects of stigmatization on mental health may be elevated among transgender youth and transgender women of color compared with, respectively, older transgender women and white transgender women.

In the present study, we aimed to examine the associations between TRS and depression and anxiety in a diverse sample of transgender women. Based upon prior literature, we hypothesized that high exposure to TRS would be associated with both depression and anxiety in this population. In addition, we explored whether associations of TRS with depression and anxiety would be moderated by age or race/ethnicity, such that associations between stigmatization and mental health are greater among younger and racial/ethnic minority transgender women compared with older and non-racial/ethnic minority (white) transgender women.

Methods

Participants and procedures

Study participants were recruited from San Francisco, CA, between November 2008 and November 2012 using purposive sampling: identifying a range of community environments where members of this population might congregate (e.g., community-based organizations, beauty salons, retail spaces, bars and nightclubs) and distributing informational fliers about this research study. Participants were included if they: were at least 18 years old, self-identified as a transgender woman, lived or worked in the San Francisco Bay area, and report having sex with a male primary partner during the past 3 months. For this study, a primary partner was defined as ''someone who you have a close emotional relationship with and with whom you have sex (e.g., a boyfriend).'' This definition was meant to differentiate between primary partners and paying partners/casual one-night stands. Respondents who passed eligibility screening were scheduled to meet in a private research office to complete a one-hour survey to determine study inclusion. Participants were encouraged to refer their peers to the study, but no monetary incentive was offered for recruitment of peers. The study survey was administered to participants using audio computer-assisted self-interview (ACASI) technology. Both English and Spanish surveys were available, but only English-language audio was available in ACASI. Participants received $50 reimbursement for their participation. Information about local HIV counseling and testing services was provided after completing the survey. Institutional Review Boards at Brown University, Providence, RI, and Public Health Institute, Oakland, CA, approved the study procedures.

Measures

Stigma. We assessed TRS using the 9-item Everyday Discrimination Scale,[33] a validated measure among other sexual minority populations.[34,35] This scale was uniquely adapted to assess the experience of stigmatization that was attributed to being transgender. Cronbach's alpha for this measure was 0.94 in this sample. An example item includes: ''In your general day-to-day life, how often are you treated with less courtesy because you are a transgender woman?'' Response options used a 5-point scale (0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Often, 4 = Always).

Depression. We used the 20-item Center for Epidemiology Scale for Depression (CES-D) to assess depression,[36] a scale previously used in studies of transgender women.[4,11,37] Cronbach's alpha for this scale was 0.88 in this sample. An example item includes: ''During the past week, I was bothered by things that usually don't bother me''.

Anxiety. Anxiety was measured using the anxiety subscale of the Brief Symptom Inventory,[38] used previously among transgender women.[32,39] Cronbach's alpha for this scale was 0.94 in this sample. An example item includes: ''In the past week, how much have you been bothered by nervousness or shakiness inside?''

Other demographic and health characteristics. The survey included questions about demographic characteristics such as age, race/ethnicity, income, education, employment, housing, place of birth, and history of incarceration. We also included self-reported health questions, such as sex reassignment surgery, medical insurance, HIV status, and self-rated general health. Self-reported health assessments also included history of unprotected anal sex during the past three months, alcohol intoxication during the past month (assessed using the item: ''During the last 30 days, how many times did you drink alcohol to the point of intoxication?''), and illicit drug use during the past month (Assessed in a composite variable, ''During the last 30 days how many times did you use any of the following: marijuana, crack, cocaine, heroin, speedball, non-prescription methadone, opiates, amphetamines, downers, hallucinogens, ecstasy?'') Each of these variables were coded as 1 = *yes* and 0 = *no*.[40]

Data Analysis

Statistical analysis was conducted using Stata/SE 11.1. First, we conducted descriptive analysis on sociodemographic variables and self-reported psychological health variables. Second, we conducted bivariate and ordinary least squares (OLS) regression models to examine the correlations between depression, anxiety, and transgender-related stigmatization. We selected variables for inclusion in the regression models based on procedures for multivariable analyses described by Hosmer & Lemeshow.[41] Specifically, we identified sociodemographic and health variables that had marginal bivariate correlations ($P < .20$) with our dependent variables (depression and anxiety), and entered each of those as predictor variables in separate OLS regression models for depression and anxiety. In bivariate analysis, HIV status was not found to be significantly associated with either anxiety or depression, thus were excluded from the models (anxiety, $P = .84$; depression, $P = .22$). Stigmatization scores were log transformed in order to achieve a normal distribution for use in regression analyses.

Results

Participant characteristics

Demographic characteristics of the 191 study participants are shown in Table 1. The mean age was 37.9 years old, with 29.3% of the participants between 18 and 29 years old. The sample was diverse in race/ethnicity, with black/African American most represented (22.0%), followed by Asian/Pacific Islander (20.9%), and Hispanic/Latino (20.9%), mixed race/other (20.4%) and white/non-Hispanic (15.7%). The majority of participants (73.3%) were born in the United States. Overall, 61.1% reported earning less than $500 in work income during the previous month. Nearly one-fourth of participants (23.9%) did not complete high school, 60.9% were unemployed, and 30.4% reported that they did not own or rent a house or apartment. Approximately half (52.4%) reported having been in prison or jail. Few participants (6.8%) had sex-reassignment procedures. In terms of self-reported health data, 39.3% self-reported HIV-positive; 35.6% reported having had unprotected anal sex during the past three months; 25.1% reported having had alcohol intoxication in the past month; 56.0% reported having used illicit drug in the past month; and 38.1% did not have medical insurance. With respect to their general health, 23.2% reported ''rarely feel fine/feel fine some of the time,'' while 42.1% reported ''feel fine most of the time.''

Transgender Discrimination

Descriptive statistics for the 9-item transgender discrimination measure are presented in Table 2. Endorsement of items was in the range of 49.0% to 31.3% of participants. The item most commonly endorsed (by 49.0%) was, ''How often do people act as if they are better than you because you are a transgender woman?'' The item least commonly endorsed (by 31.3%) was, ''How often do people act as if you are dishonest because you are a transgender woman?''

Correlates of Depression and Anxiety

Table 3 presents multivariable correlates of depression based on OLS regression. Depression was independently

Table 1. Participant Characteristics ($n = 191$)

Characteristic	%	(n)
Race Ethnicity		
Asian/Pacific Islander	20.9	(40)
Black/African American	22.0	(42)
Hispanic (Latino)	20.9	(40)
White (non-Hispanic)	15.7	(30)
Mixed Race/Other	20.4	(39)
Income		
Prior work income last month ≥ $500	39.0	(74)
Prior work income last month < $500	61.1	(116)
Highest Level of Education		
Less than high school	23.9	(45)
High school or GED	33.5	(63)
Some college or more	42.6	(80)
Employment		
Full or part-time job	33.9	(64)
Unemployment	60.9	(115)
Other	5.3	(10)
Housing Situation, Past 3 Months		
Own or rent house/apartment	69.6	(133)
Unstable housing or homeless/others	30.4	(58)
Born in the United States		
No	26.7	(51)
Yes	73.3	(140)
Been in Prison or Jail, Ever		
No	47.6	(91)
Yes	52.4	(100)
Had Sex-Reassignment Procedures		
No	93.2	(178)
Yes	6.8	(13)
General Health		
Always feel fine	34.7	(66)
Feel fine most of the time	42.1	(80)
Rarely feel fine/Feel fine some of the time	23.2	(44)
Medical Insurance		
No	38.1	(78)
Yes	61.9	(117)
HIV Status (Self-Report)		
HIV-Positive	39.3	(75)
HIV-Negative/Don't Know	60.7	(116)
Unprotected Anal Sex, Past Three Months		
No	64.4	(123)
Yes	35.6	(68)
Alcohol Intoxication, Past 30 Days		
No	74.9	(143)
Yes	25.1	(48)
Illicit Drug Use, Past 30 Days		
No	44.0	(84)
Yes	56.0	(107)
Age, Years	M: 37.92	SD: 11.65
Depression (CES-D)	M: 16.98	SD: 11.17
Anxiety (BSI)	M: 1.80	SD: 0.87
Transgender Stigmatization	M: 1.24	SD: 0.95

CES-D, Center for Epidemiology Scale for Depression; BSI, Brief Symptom Inventory; M, median; SD, standard deviation.

Table 2. Transgender-Related Stigma Scale

Assessment Item	*Mean*	*SD*	*%**	(n)
All questions prefaced with, "In your general day-to-day life …"				
1. How often are you treated with less courtesy because you are a transgender woman?	1.27	1.135	42.19	(81)
2. How often are you treated with less respect because you are a transgender woman?	1.40	1.206	45.83	(88)
3. How often do you receive poor service because you are a transgender woman?	1.19	1.11	35.94	(69)
4. How often do people act as if they are afraid of you because you are a transgender woman?	1.08	1.153	32.29	(62)
5. How often do people act as if you are not as smart because you are a transgender woman?	1.07	1.158	33.33	(64)
6. How often do people act as if you are dishonest because you are a transgender woman?	1.04	1.097	31.25	(60)
7. How often do people act as if they are better than you because you are a transgender woman?	1.49	1.219	48.96	(94)
8. How often have you been called names because you are a transgender woman?	1.39	1.223	43.23	(83)
9. How often have you been threatened or harassed because you are a transgender woman?	1.27	1.175	36.46	(70)

*Participants who responded "Sometimes," "Often," or "Always."

associated with exposure to transgender stigmatization ($\beta = 0.31$, SE = 0.07, $P < .001$), adjusting for all other co-variates in the model. Other independent correlates of depression included history of incarceration ($\beta = -0.39$, SE = 0.14, $P < .01$), lower self-reported general health (feeling "fine some of the time/rarely feel fine" compared with "always feel fine"; $\beta = -0.54$, SE = 0.18, $P < .01$), and alcohol intoxication during the past 30 days, ($\beta = 0.32$, SE = 0.17, $P = .05$).

Table 4 presents multivariable correlates of anxiety based on OLS regression. Anxiety was independently associated with exposure to transgender stigmatization ($\beta = 0.39$, $P < .001$), adjusting for all other co-variates. Other independent correlates of anxiety included age ($\beta = -0.01$, SE = 0.01, $P < .05$), lower levels of self-reported general health (feeling "fine some of the time/rarely feel fine" compared with "always feel fine"; $\beta = 0.57$, SE = 0.17, $P < .01$) and alcohol intoxication during the past 30 days ($\beta = 0.41$, SE = 0.15, $P < .01$).

In exploratory analysis, we examined whether age moderated the effects of transgender stigmatization on depression and anxiety, and whether race/ethnicity moderated the effects of transgender stigmatization on depression and anxiety. Analyses followed procedures described by Aiken and West (1991).[42] Significant interaction terms would suggest that the effects of stigmatization on either depression or anxiety varied by age or by race/ethnicity categories. We created two interaction variables based on the product of stigmatization x age (age represented using a continuous variable) and stigmatization x race/ethnicity (race/ethnicity categorical variable, with Asian/Pacific Islander as the reference category), and examined whether these interaction terms were associated with depression or anxiety in multivariable regressions. We found no significant stigmatization-by-age interaction effects or stigmatization-by-race/ethnicity interaction effects on either depression or anxiety, Ps > .05.

Discussion

Study findings reported here supported our hypothesis that exposure to TRS was significantly positively associated with both depression and anxiety in transgender women. These associations were significant in multivariable OLS regression models, in which we controlled for multiple demographic characteristics and self-reported general health and

Table 3. Independent Correlates of Depression (CES-D) in OLS Regression

Covariates	*β*	*SE*	*95% Confidence Interval*	
Transgender Stigmatization (z)	0.31***	0.07	0.00717	0.45
Age	−0.01	0.01	−0.02	0.002
Race/Ethnicity[a]				
Black/African American	−0.02	0.21	−0.43	0.39
Hispanic/Latino	−0.18	0.22	−0.62	0.26
White (non-Hispanic)	−0.22	0.23	−0.67	0.23
Mixed race/ethnicity	−0.24	0.21	−0.66	0.18
Been in Prison or Jail, Ever	−0.39**	0.14	−0.67	−0.11
General Health[b]				
Feel fine most of the time	0.09	0.17	−0.24	0.43
Feel fine rarely/some of the time	0.54**	0.18	0.18	0.91
No Medical Insurance	0.13	0.15	−0.16	0.42
Unprotected Anal Sex, Past 30 Days	0.04	0.15	−0.25	0.34
Alcohol intoxication, past 30 days	0.32*	0.17	−0.005	0.65
Illicit Drug Use, Past 30 Days	0.33	0.32	−0.31	0.96

[a]Reference group = Asian/Pacific Islander.
[b]Reference group = Always feel fine.
*$P = .05$; **$P < .01$; ***$P < .001$.
OLS, ordinary least squares.

Table 4. Independent Correlates of Anxiety (BSI) in OLS Regression

Covariates	*β*	*SE*	*95% Confidence Interval*	
Transgender Stigmatization (z)	0.39**	0.07	0.26	0.53
Age	−0.01	0.01	−0.02	−0.002
Race/Ethnicity				
Black/African American	−0.02	0.19	−0.39	0.36
Hispanic/Latino	−0.10	0.20	−0.50	0.30
White (non-Hispanic)	−0.34	0.21	−0.46	0.07
Mixed race/ethnicity	−0.32	0.20	−0.71	0.07
Stable Housing, Past 3 Months	−0.03	0.14	−0.30	0.24
General Health				
Feel fine most of the time	0.06	0.16	−0.25	0.37
Feel fine rarely/some of the time	0.57*	0.17	0.23	0.91
Unprotected Anal Sex, Past 3 Months	0.16	0.14	−0.11	0.43
Alcohol Intoxication, Past 30 Days	0.41*	0.15	0.11	0.71
Illicit Drug Use, Past 30 Days	0.17	0.14	−0.11	0.45

*$P<.01$; **$P<.001$.

health behaviors. Associations were not moderated by participants' age or race/ethnicity, suggesting robust effects of stigmatization on depression and anxiety independent of these sociodemographic factors.

These findings are in line with previous research on the association between stigmatization and psychological health.[7,13,43] For example, previous studies found that discrimination was significantly associated with severe depression in a sample of low-income, Latina transgender women,[7] and stigmatization was positively associated with psychological distress in an online sample of 1093 transgender participants.[13] This growing body of research brings attention to the social factors that contribute to high prevalence of psychological distress in transgender populations.

These findings can be understood using the psychological mediation framework developed by Hatzenbuehler stating that distal stigma-related stressors in sexual minority populations can lead to psychological problems such as depression, anxiety, and substance use disorders, and positing that this pathway is mediated by coping/emotion regulation, social/interpersonal, and cognitive factors.[44] However, this framework was developed based on studies focusing on lesbian, gay, and bisexual individuals. Findings reported here suggest that Hatzenbuehler's model might also be useful for understanding the development of psychological problems in transgender women. Mediators of the associations between stigma and psychological distress among transgender women should be examined in future research.[44]

Psychological processes described here must be contextualized in a broader social and structural context, in which transgender women are systematically stigmatized and excluded. Indeed, we found that approximately one-third to one-half of participants positively endorsed each of the items in the transgender stigmatization measure, reflecting frequent experiences of disrespect, poor service, being called names, being threatened or harassed, and other forms of mistreatment. Interventions at a macro level are needed to mitigate these forms of stigma and discrimination, as well as other institutionalized forms of transgender stigma and discrimination not assessed here (e.g., access to fair and appropriate employment, housing, health and legal services).

The attention on transgender women is warranted. Studies have suggested that transgender women tend to have a higher risk of mental health problems than transgender men.[4,13,43] In a national online sample of 1,093 transgender participants across the country, 44.1% had clinical depression and 33.2% had anxiety, and transgender women had a significantly higher prevalence of both depression and anxiety than transgender men.[13] The same study also showed that the odds of depression and anxiety were, respectively, 2.19 and 1.36 times higher among transgender women than transgender men.[13] Several factors may place transgender women at a higher risk of psychological distress than transgender men, such as greater difficulty blending into society (also known as ''passing'') and experiencing higher levels of gender-based stigmatization and forms of discrimination.[13] These include gender abuse, such as verbal assaults or physical abuse,[11,22] intimate partner violence,[44] and physical or sexual assaults (38%–50%) that might be frequently targeted toward transgender women.[10,11,22] Other factors include a high prevalence sex work as a main economic activity (64%–67%) in samples of transgender women,[45,46] and a high prevalence of sexual risk behaviors among this population. Past studies also found that transgender women are more likely to report unstable housing and low income than transgender men.[45,47] The reaction to gender non-conformity is generally thought to be less severe for masculine females as compared to feminine males, regardless of orientation and identity.[48] The combination of these issues implies a unique set of health needs and risks among this specific population.

These findings have implications for counseling and public health efforts to reduce the burden of psychological distress among transgender women. Practitioners may find it useful to explore experiences of social stigmatization and discrimination impacting a clients' psychological health. Efforts to promote cognitive coping and interpersonal skills as well as challenging stigmatization may prove helpful in developing and promoting protective strategies including support networks, self-acceptance, and gender validation. Given the subject nature, care must be given so that strategies do not escalate risks for further stigmatization or potential violence.

To date, there are no known evidence-based interventions to reduce psychological distress or other mental health problems among transgender women. Further research is urgently needed to test psychological counseling and intervention approaches that can effectively improve psychological well-being and address the social determinants of mental health, such as exposure to social stigmatization, among transgender women.

Limitations of this study should be noted: First, as our analysis was based on cross-sectional survey data, we cannot establish causality and temporality between stigmatization and psychological distress in this population; Second, social-desirability bias and recall errors may occur in self-reported data; Third, our findings are not representative of the diverse transgender population as our sample only included participants in San Francisco reporting a relationship with a male. Specifically, there might be limited generalizability of findings to transgender women who fall outside of our inclusion criteria; Fourth, recruitment methods used in this study may yield an overrepresentation of alcohol consumption, and depressed socioeconomic backgrounds; Fifth, the transgender stigmatization scale was adapted from a general measure of everyday discrimination, and so it may not reflect all forms of stigmatization that affect transgender women, such as structural or institutional forms of stigma; Sixth, the survey measure did not include other potential predictors of mental health problems (e.g., exposure to violence and difficulty ''passing'' as a cisgender woman); Finally, this survey examined TRS at the exclusion of other forms of stigma (e.g., race/ethnicity). As such, the intersectional determinants of health are not reflected here.

Despite these limitations, this study provides directions for future research and directions for intervention and practice with this population. Future studies are needed to understand the mechanisms explaining how stigmatization is associated with mental health problems in transgender women[10,11,22] as well as assess for mediating factors of these associations, including substance use or social isolation[44] and protective factors such as social support and adaptive coping. Although we did not find moderating effects pursuant to our aims, research is needed to examine disparate outcomes among potentially vulnerable subgroups.[32] Studies addressing other indicators of psychological wellbeing in transgender women (e.g., eating disorders, body image disorders, and substance abuse) are also needed to develop more comprehensive understandings of the health of this population. Continued research is needed examining the pro-social factors promoting mental health and resilience. Finally, in light of the paucity of research on these topics among transgender men, future studies can examine these same areas among this group.

Given the range of health and psychological challenges among transgender women described in this study and in previous research, efforts to develop multi-component counseling and intervention strategies for working with this population are needed. For example, integrated counseling interventions that can address mental health, gender identity and transition, substance use, and sexual risk behavior might be particularly useful, due to the substantial co-occurrence of these issues among some transgender women.[49] Initiatives to coordinate and develop linkages across service providers working with different facets of transgender health are warranted. More broadly, structural and policy approaches to reduce stigmatization and other forms of systematic discrimination against transgender individuals are vital strategies to protect and promote the health of this population.

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Author Disclosure Statement

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